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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,820	01/22/2001	David C. Sudolcan	L-0170.23 (D-E)	2826
7590	12/08/2004			
LAW OFFICES OF CHRISTOPHER L. MAKAY 1634 Milam Building 115 East Travis Street San Antonio, TX 78205			EXAMINER JACKSON, ANDRE K	
			ART UNIT 2856	PAPER NUMBER

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/766,820

Applicant(s)

SUDOLCAN ET AL.

Examiner

André K. Jackson

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on 09/27/04, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bethuy in view of Kato.

Regarding claim 60, Bethuy discloses a first probe extending into a liquid container; a second probe extending into a liquid container (38a,

38b); a controller coupled to the first and second probe (140); Bethuy discloses where both the first and second probes receives a signal indicating an insufficient amount of liquid in the liquid container when both the first probe and the second probe are contacted by liquid in the container the signal is attenuated to the ground probe indicating to the controller a sufficient amount of liquid in the liquid container (Columns 8 and 9). Bethuy does not disclose is where the controller outputs and receives a pulse signal received at the first probe and second probe. However, Kato discloses in the patent entitled "Method and apparatus for evaluating the performance of dielectric substances" where the controller outputs and receives a pulse signal (Column 13, lines 15-32, Column 15, lines 32-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bethuy to include where the controller outputs and receives a pulse signal. By adding this feature the impedance between the probes would be inversely proportional to the amount of probe surface area in contact with the liquid where the current flow is directly proportional to the liquid level.

4. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bethuy in view of Lichti.

Regarding claim 60, Bethuy discloses a first probe extending into a liquid container; a second probe extending into a liquid container (38a,

38b); a controller coupled to the first and second probe (140); Bethuy discloses where both the first and second probes receives a signal indicating an insufficient amount of liquid in the liquid container when both the first probe and the second probe are contacted by liquid in the container the signal is attenuated to the ground probe indicating to the controller a sufficient amount of liquid in the liquid container (Columns 8 and 9). Bethuy does not disclose is where the controller outputs and receives a pulse signal received at the first probe and second probe. However, Lichti discloses in the patent entitled "Apparatus and circuit for monitoring the ink supply and ink printer devices" where the controller outputs and receives a pulse signal (Abstract; Column 2, lines 8-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bethuy to include where the controller outputs and receives a pulse signal. By adding this feature the impedance between the probes would be inversely proportional to the amount of probe surface area in contact with the liquid where the current flow is directly proportional to the liquid level.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 60 have been considered but are moot in view of the new grounds of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J.

December 6, 2004

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
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